5. 【迴文詞/Palindromes】

輸入一個字串,判斷它是否為迴文串以及鏡像串。輸入字串保證不含數字 0。所謂迴文串就是反轉以後和原串相同,如 abba 和 madam。所謂鏡像串,就是 左右鏡像之後和原串相同,如 2S 和 3AIAE。注意,並不是每個字元在鏡像之後 都能得到一個合法字元。在本題中,每個字元的鏡像如下表所示(空白項表示該 字元鏡像後不能得到一個合法字元)。

Character Reverse Character Reverse Character Reverse

| À | A | M | M | Y | Y |
|----|---|---|---|---|---|
| В | | N | | Z | 5 |
| C- | | 0 | 0 | 1 | 1 |
| D- | | P | | 2 | ສ |
| E, | 3 | Q | | 3 | E |
| F | | R | | 4 | |
| G | | S | 2 | 5 | Z |
| H· | H | T | T | 6 | |
| I | I | U | ū | 7 | |
| J | L | V | V | 8 | 8 |
| K | | U | U | 9 | |
| L | J | X | X | | |
| | | | | | |

鏡像字元

輸入的每行包含一個字串(至多只有 20 個字元;且保證只有上述合法字元,不含空白字元),判斷它是否為迴文串和鏡像串(共 4 種組合)。每組資料之後輸出一個空行。(Page 3-14, UVa401)

輸入:

NOTAPALINDROME

ISAPALINILAPASI

2A3MEAS

ATOYOTA

輸出(註):

NOTAPALINDROME -- is not a palindrome.

ISAPALINILAPASI -- is a regular palindrome.

2A3MEAS -- is a mirrored string.

ATOYOTA -- is a mirrored palindrome.

(註)

Output

For each input string, you should print the string starting in column 1 immediately followed by exactly one of the following strings.

STRING CRITERIA

| - | if the string is not a palindrome and is not a mirrored string | | |
|------------------------------|--|--|--|
| ' is a regular palindrome.' | if the string is a palindrome and is not a mirrored string | | |
| ' is a mirrored string.' | if the string is not a palindrome and is a mirrored string | | |
| ' is a mirrored palindrome.' | if the string is a palindrome and is a mirrored string | | |

Note that the output line is to include the $^{\cdot}$ - $^{\cdot}$ s and spacing exactly as shown in the table above and demonstrated in the Sample Output below.

In addition, after each output line, you must print an empty line.